Amendments to the Drawings:

The attached three sheets of drawings includes changes to Figs. 1, 3 and 5. These sheets replace the original sheets including Figs. 1, 3 and 5.

Attachment: Three (3) Replacement Sheets.

REMARKS

Claims 1-18 are pending in the present application. The drawings were objected to under 37 CFR §1.83(a) as failing to show sufficient details as described in the specification and under 37 CFR §1.84(p)(5) as including reference characters not mentioned in the description. The specification was objected to under 35 U.S.C. §112, first paragraph, as having terms that are not clear, concise and exact. Claim 5 was objected to as lacking antecedent basis. Claims 1-6 and 8-18 were rejected under 35 U.S.C. §102(e) as being anticipated by Foster et al. (US 6,859,273). Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Foster et al.

Claims 1, 5-7, 15, 16 and 18 have been amended. Claims 2 and 3 have been canceled. Claims 19 and 20 have been added. The specification has been amended. The drawings have been amended. Reconsideration of the application is respectfully requested.

Certified priority document

A certified copy of German priority document DE 102 29 407.0 is submitted herewith.

Objections to the drawings

The drawings were objected to under 37 CFR §1.83(a) as failing to show sufficient details as described in the specification. Replacement Figs. 1 and 3 are submitted herewith for the Examiner's consideration. Replacement Figs. 1 and 3 now show details of the blocks of the flowcharts, as described in the specification on page 13, lines 4-20, and page 14, line 16, through page 15, line 5, respectively. It is respectfully submitted that no new matter has been added.

The drawings were objected to under 37 CFR 1.84(p)(5) as including in Fig. 5 reference signs 42 and 44 not mentioned in the description. A replacement Fig. 5 is submitted herewith for the Examiner's consideration. Replacement Fig. 5 now shows reference number 40 instead of reference number 42 for the output console described in the specification at page 16, line 27. The specification has been amended at page 16, line 30, to include reference

number 44 for the display shown in Fig. 5. It is respectfully submitted that no new matter has been added.

Withdrawal of the objections to the drawings under 37 CFR 37 CFR 1.83(a) and 1.84(p)(5) is respectfully requested.

Objections to the specification

The specification was objected to under 35 U.S.C. §112, first paragraph, as having terms that are not clear, concise and exact. The specification has now been accordingly amended for clarity, conciseness and exactness. It is respectfully submitted that no new matter has been added.

Withdrawal of the objection to the specification under 35 U.S.C. §112, first paragraph, is respectfully requested.

Objection to the claims

Claim 5 was objected to as lacking antecedent basis for "the user." Claim 5 has now been accordingly amended to provide the antecedent basis.

Withdrawal of the objection to claims is respectfully requested.

Rejections under 35 U.S.C. §102(b), §103(a)

Claims 1-6 and 8-18 were rejected under 35 U.S.C. §102(e) as being anticipated by Foster et al. (US 6,859,273). Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Foster et al.

Foster et al. describes a method for operating a scanning microscope in which the operator enters data into an interactive user interface using a user input device, the information including depth of scan, mirror voltage ramps, etc., for controlling the microscope accordingly. See col. 4, lines 30-37.

Independent claim 1 of the present application has also been amended to incorporate features of claims 2, 3 and 6 so as to recite

> Inputting at least one image quality feature after an image of the specimen is acquired, the at least one image quality feature including at least one of a noise of detected image data, a signal-to-noise ratio of the detected image data, bleaching behavior of a fluorescent marking of a specimen, a detection speed of an image data set to be detected, a contrast, and a resolution;
>
> Converting the at least one image quality feature into at least one system parameter of the scanning microscope by the control computer, the at least one system parameter including at least one of a power level of a light source, a wavelength of the light source, a scanning speed of a scanning unit, a diameter of a confocal detection pinhole, an amplifier characteristic of a confocal detector, and a number of individual images to be detected for averaging of an image;
>
> ...
>
> wherein an image quality expected to be achievable, for the at least one inputted image quality feature, is calculated in the next acquired image and outputted to the user.

Independent claim 15 of the present application has also been amended to incorporate features of claims 2, 3 and 6 so as to recite

> an operating console for inputting at least one image quality feature after an image of the specimen is acquired, the at least one image quality feature including at least one of a noise of detected image data, a signal-to-noise ratio of the detected image data, a bleaching behavior of a fluorescent marking of a specimen, a detection speed of an image data set to be detected, a contrast, and a resolution,
>
> whereby the at least one image quality feature can be converted by the control computer into at least one system parameter of the scanning microscope that can be set, the at least one system parameter including at least one of a power level of a light source, a wavelength of the light source, a scanning speed of a scanning unit, a diameter of a confocal detection pinhole, an amplifier characteristic of a confocal detector, and a number of individual images to be detected for averaging of an image,

> wherein an image quality expected to be achievable, for the at least one inputted image quality feature, can be calculated by the control computer in the next acquired image and outputted to the user.

It is respectfully submitted that Foster et al. does not teach at least these feature(s) of claims 1 and 15. In contrast, Foster et al. merely describes user input of data, such as depth of scan, mirror voltage ramps, etc., for controlling the microscope accordingly. Foster et al. does not teach input of any of the recited image quality features, such as contrast and resolution. Nor does Foster et al. teach converting of any of the image quality features into any of the recited system parameters, such as the power level of the light source. Moreover, Foster et al. does not teach that an image quality expected to be achievable, for the at least one inputted image quality feature, is calculated in the next acquired image and outputted to the user, as recited. Because Foster et al. is missing at least these features of independent claims 1 and 15, it is respectfully submitted that Foster et al. cannot anticipate these claims or their dependent claims.

Independent claim 11 of the present application recites

> Simulating the acquisition of a further image in the context of a modified system parameter; and
>
> Displaying the simulated further image to the user.

Independent claim 17 of the present application recites

> means for simulating the acquisition of a further image in the context of a modified system parameter; and
>
> an output console for displaying the simulated further image to the user.

It is respectfully submitted that Foster et al. does not teach at least these feature(s) of claims 11 and 15. In contrast, Foster et al. merely describes user input of data, such as depth of scan, mirror voltage ramps, etc., for controlling the microscope accordingly. Foster et al. does not

teach simulating the acquisition of a further image in the context of a modified system parameter, as recited. Nor does Foster et al. teach displaying the simulated further image to the user, as recited. Because Foster et al. is missing at least these features of independent claims 11 and 17, it is respectfully submitted that Foster et al. cannot anticipate these claims or their dependent claims.

With specific regard to claim 6, it is respectfully submitted that Foster et al. does not teach displaying to the user image quality expected to be achievable for the at least one image quality feature, as recited. Regarding claim 7, it is respectfully submitted that Foster et al. does not teach or suggest displaying, for the image quality expected to be achievable, a color indication, in red, yellow or green, in accordance with the conditions recited in the claim.

Withdrawal of the rejection of claims 1-6 and 8-18 under 35 U.S.C. §102(e), and the rejection of claim 7 under 35 U.S.C. §103(a), based on Foster et al. is respectfully requested.

New claims

New claims 19 and 20 have been added reciting features deleted from claim 6. It is respectfully submitted that new claims 19 and 20 are patentable over the prior art of record for at least the same reasons claim 1 and 6 are.

CONCLUSION

It is respectfully submitted that the application is now in condition for allowance.

Respectfully submitted,

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